

REMARKS

Claims 1-13 are now present in this application

The specification and claims 1 and 10 have been amended, and claims 11-13 have been presented. Reconsideration of the application, as amended, is respectfully requested.

Claims 1-10 stand rejected under 35 USC 103 as being unpatentable over Marcuse et al., U.S. Patent 6,385,383. This rejection is respectfully traversed.

In the present application, the optical wave-guide are curved. On the other hand, in the patent to Marcuse et al., the optical attenuator is constructed with an optical wave-guide structure, and particularly a linear wave-guide structure. The linear wave-guide structure has two locations cladding different materials. This type of attenuator structure is embedded, which may render the fabrication process more difficult and subjected to adverse reflection. Further, the temperature adjustment range has to reach 180°C, which can cause instability in the disclosed structure. In addition, the core wave-guide of the attenuator structure is enclosed in a cladding layer, which renders the fabrication process more complex.

In this application, Figs. 3 to 6 show that the optical attenuator structure of the present invention, when undergoing temperature-controlled wave-guide adjustment, exhibits good reliability and stability in respect to light attenuation and polarization variations. Compared to the prior art, the optical attenuator has a temperature adjustment range that can be controlled within 30°C, and thus is less subject to aging due to high temperature variations. Further, light attenuation can be more easily controlled, and the optical attenuator has a uniform direction with the serial connection of the integrated element, which facilitates its integration.

In view of the foregoing amendments and remarks, it is respectfully submitted that the prior art utilized by the Examiner fails to teach or suggest the apparatus and method of independent claims 1 and 10, or their dependent claims. Accordingly, reconsideration and withdrawal of the 35 USC 103 rejection are respectfully requested.

Favorable reconsideration and an early Notice of Allowance are earnestly solicited.

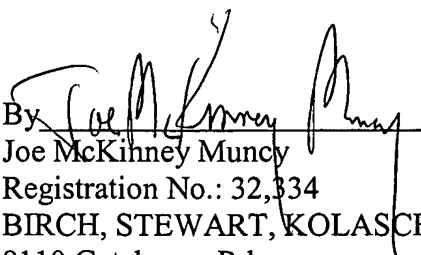
Because the additional prior art cited by the Examiner has been included merely to show the state of the prior art and has not been utilized to reject the claims, no further comments concerning these documents are considered necessary at this time.

In the event that any outstanding matters remain in this application, the Examiner is invited to contact the undersigned at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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